# Starting Strength

# The Quest for a Stronger Overhead Press

by Bill Starr

Recently, there has been a revival of interest in the overhead press, not just as an auxiliary movement in a fitness routine, but as an extremely strong primary lift in a strength program. When I first got interested in weight training – which in turn led me to the sport of Olympic lifting – the overhead press was one of the contested lifts. At that point in time, everyone who trained with weights did overhead presses as a primary exercise: Olympic lifters, of course, bodybuilders, strength athletes, and those who trained for overall fitness.

The overhead press was the most popular exercise in all of weight training because it was the lift that served as a gauge of someone's upper body strength. Or more accurately, it indicated a person's overall strength. Whenever someone wanted to know how strong you were, he asked, "How much can you press?"

However, several events occurred in the early seventies that changed how people trained their upper bodies and ended up relegating the overhead press from a "must-do" exercise to one that was only done occasionally and with relatively light poundages.

Perhaps the biggest blow to the overhead press came when the International Olympic Weightlifting Committee voted to eliminate the lift from official competition in 1972. The reason given for this decision was that the overhead press was causing a large number of lower back injuries. This wasn't true, but it was used as a smokescreen to get rid of the press. The real reason why it was dropped was because the judges at international contests were using the press as a political tool against their hated rivals.

The press had been transformed from a pure strength move to a dynamic one in the early sixties by a middleweight from El Paso, Texas, Tony Garcy. I trained with Tony at the York Barbell Club, and his style of pressing was so revolutionary that it was difficult to change from the conventional form to the more explosive form he had invented. When a lifter utilized the new style, the bar would explode off his shoulders and be locked out in a nanosecond. It was extremely difficult to judge: did the lifter start with his knees bent? Were they fully locked at the finish? If instant replay had been available, perhaps the judges could have made the correct call, but of course they didn't, and very quickly international judges began using the press to enhance the chances of those they wanted to do well and destroy those who posed a threat to their team's title. In 1967 at the Little Olympics in Mexico city, Joe Puleo should have won the light heavyweight class, but two judges, one from Bulgaria who was very outspoken in his dislike for Americans, and one from Australia who was trying to get his number one

officiating card, passed absolutely everything and were particularly generous with the Russian Belyaev. They passed obvious knee kicks and ridiculous back bends. Puleo's presses were all cleanly done, but as a result of the crooked judging, he ended up with the silver. This ended up costing the U. S. the team title. There were many more such episodes, but you get the point – it had gotten out of hand and the only solution they could come up with was to eliminate the lift altogether. This decision would have an impact on everyone who took up weight training after that.

While this was going on, Joe and Ben Weider took the control of the sport of bodybuilding away from the A.A.U. One of the first things that the Weiders did was to get rid of the athletic points, a vital part of scoring at the top meets in the A.A.U. Up to five points could be obtained by achieving success in some sport and since bodybuilders were including heavy presses in their training, most entered Olympic meets to earn those valuable points. It had made perfect sense: they were going to the meets anyway because that's where the physique competitions were held, after the lifting. And being seen for nine attempts on the platform allowed them to be viewed earlier by the same people that would be judging them later on. But without the need for athletic points, the top bodybuilders stopped doing heavy presses and this, naturally, trickled down to those aspiring athletes in the sport. That was strike two for the press.

Strike three was the rapid growth of the new sport of powerlifting, which was much easier to do than the more complicated Olympic lifts and used the bench press for the test of upper body strength. Powerlifters saw no reason to do any overhead work, which meant the press was no longer a part of their routines.

The seventies was also the time when strength training for athletes, particularly in the sport of football, became extremely popular. Many coaches and athletic directors were well aware that the press had been dropped from the sport of Olympic reasons for "safety" reasons and wanted no part of that can of worms. Finally, the influx of highly-designed machines caused many more weight trainers to shun the overhead press.

The result was that in a span of only a few years the standard of strength for the upper body shifted from the overhead press to the bench press. If any pressing was done at all in a routine, it was done with light weights and relatively high reps. The once mighty and proud overhead press had been relegated to ancillary status.

Except for a handful of die-hards like myself. The overhead press was one of the very first exercises I did when I got into weight training. No one taught me how to do it – I used photos from magazines to guide me and picked up the various form points along the way. Like just about every other beginner, my initial goal was to be able to press bodyweight. This took me three years, then I bumped my goal up to 200 lbs, which took me another year to achieve. This continued on throughout my career. Fully one-third of my training for Olympic lifting was spent on the overhead press, and even after I stopped competing the overhead press continued to be a primary movement in my programs. In truth, one of the reasons I quit Olympic lifting was because I didn't enjoy the meets after the press was dropped. A large number of my fellow competitors felt the same and they retired as well. To me, the press, snatch, and clean and jerk were the perfect combination to determine who was the strongest and also who possessed the most athleticism.

As I began my career as a strength coach for professional and collegiate sports teams, the press always had a place in my routines. Even now, as I do a high-rep lighter-weight program in deference to my age and joints, overhead presses are done at least twice a week.

In the last few years, more and more aspiring strength athletes have contacted me for advice as to how to do the dynamic form of overhead presses and how to make them stronger. Really stronger. There are a number of reasons why this is happening, which I will not go into, but I am happy that it is because I believe the overhead press is an important exercise. Those approaching me for information are setting high goals too and this I think is great. They're talking of pressing 250, 275, and even the magic number of 300. They, too, were my goals as I moved up the strength ladder and I recall my joy when I finally reached them. One thing I point out to all of the really ambitious athletes is that they need to be patient – gains do not come fast, except at first, on the overhead press. I mentioned that it took me three years to press my bodyweight, 185, and another to move on to 200, so anyone who is serious about reaching any decent pressing goal has to be willing to put in a great deal of work.

Another thing any athlete who wants to press a heavy weight has to understand is that the lift is easy to learn, but difficult to master. It is technically very hard to press a heavy weight. Few think in terms of athletic attributes when considering the press, but the move requires a very high degree of timing, coordination, and balance as well as a generous supply of strength. It is, in my opinion, a high-skill lift which is as hard to master as the snatch and clean and jerk.

It might be helpful to know what some of the lifters pressed before steroids came along. Dave Sheppard pressed 325 in 1958 at a bodyweight of 198, and Tommy Kono did 322 in 1959 and 350 in 1961 at 198. At 181 he pressed 376+ and at 165, he did 292. Stan Stanczyk pressed 286 at 181 in 1948 and John Grimek, weighing just under 200-lbs, pressed 350 at an exhibition in the late forties.

I trained with Linwood Gilliland at the Dallas Y and as a 198er he held the National YMCA record at 310, set in 1957. My pre-steroid presses weren't in that lofty category, but at 181 I pressed 255, 75 pounds over my bodyweight, and I seldom had the highest press in my class. There were several in my weight division who did more than 255 and there were even some in lower classes who out-pressed me.

But since the overhead press fell from grace, I've never seen anyone press 75 pounds over bodyweight, or very few, for that matter, who could even handle bodyweight. Yet I know it can be done because I saw it done countless times and did it myself. It's simply of matter of putting in the necessary work in the weight room.

The first step, naturally, is to practice the form of the press until you have it down pat. Keep in mind that your form doesn't have to be precise in order for you to press heavy weights. The closer you can come to copying Garcy's technique the better, but some of the greatest pressers of the sixties didn't convert to the more dynamic press style. Bill March, for one, didn't use a dynamic start or explode the bar upward; he merely raised the bar from his shoulders to lockout like it was traveling up an elevator. His 390 press at 236 at the '69 Seniors in Chicago is considered the greatest pure press in American Olympic lifting history. At least by me.

I went over form points for the Garcy-style press in my recent article on the Olympic press, so I won't bother going over them again. (See it here at <a href="http://startingstrength.com/articles/olympic press">http://startingstrength.com/articles/olympic press</a> starr.pdf) But it would be a smart idea to refer to that article if you want to learn how to do the dynamic form of the overhead press.

I'll repeat this often-told story because it fits so perfectly. Norbert Schemansky was once approached by an eager fan and asked, "How do I get my press stronger?" Ski replied, "Press." Good advice – the press needs to be worked often and diligently. When the lift was part of Olympic lifting competition, most lifters did presses at every session in the weight room and they often worked them

to limit no less that once a week. It's the kind of lift that has to be leaned on, much like the squat. This means that if you want to move the numbers up on the press, you will need to work them at least twice a week. If you're also doing some of the exercises that I'm about to recommend, you can get by with pressing heavy once a week.

A set and rep formula that has proven to get results for myself and my athletes over the years is as follows: two, or for some, three sets of five as warm-ups. then three sets of triples across (with the same poundage). Slowly expand this to six work sets of three across, and unless you're going to add in one of my recommended exercises for overloading, do a back-off set of ten.

A sample workout might look like this: 95x5, 115x5, 135x5, 165x3x3-6 sets with a back-off set of 10 with 145. The key to making this work is that you cannot add to the top-end work sets unless you make every single rep in the routine, not counting the back-off set. Should you only be able to make two reps on your final work set, use that weight your next pressing session. If you are successful, increase the work sets by five pounds. And so on and on upward.

Eventually, you'll plateau. Otherwise, everyone would glide right up to a 300-lb, press as smooth as silk. This obviously doesn't happen or there would be thousands of 300-lb pressers across the country, and this certainly is not the case.

That's where my exercises come into the act. They'll help to jolt the muscles and attachments that are involved in pressing and make them stronger. Stronger muscles, tendons, and ligaments translate to moving more weight overhead.

The number one exercise on my list for improving the press is weighted parallel-bar dips. I had been training for two years before I came across dip bars in a weight room and I began dipping right away. I did so because I had read about Marvin Eder, who was perhaps the strongest bodybuilder ever. He never really received much attention because Hoffman linked him with Weider and since Hoffman controlled both Olympic lifting and bodybuilding, he was basically blackballed in *Strength and Health*. But Peary Rader at *IronMan* was much more open-minded and ran articles on him.

His lifts were beyond belief. In the early fifties, long before any type of strength-enhancing drug came along, he did a dip with 434 lbs added to his bodyweight of 198 for a total of 632 pounds, and did seven reps with 400 pounds around his waist. The overhead press was his favorite lift and that's why he dipped so heavy, to improve the press. And it did just that. He overhead pressed 355 at 198 and could bench press 575 pounds. Only Doug Hepburn, a heavyweight lifter, could handle over 500 in 1953.

I've always done weighted dips and encouraged my Olympic lifters to do them as well. The one that did the best was Steve Dussia, when I was coaching at the University of Hawaii. Steve, at a drug-free 181, did five reps with 200 lbs, and a single with 250. Add in his bodyweight and it comes up to dipping with 431 pounds. And it brought the desired results. The press was by then no longer a part of the sport, but the strength Steve gained in his upper body from weighted dips carried over to his jerks very directly. And I felt they helped stabilize his shoulder girdle for snatches and cleans as well.

If a trainee has never done dips, I have him do them without any weight until he can do 4 sets of 20, and then I have him add weight. Initially, this can be a dumbbell held between the legs. This works up to about a hundred pounds, then a belt is needed. The dip belt is available at most weightlifting supply sites, and is basically a leather lifting belt with a chain and hook attached to it. In fact, you can just use your lifting belt with a chain and hooks. There is a fair amount of technique

involved, so it takes a few months of doing weighted dips before most get the feel of what they need to do.

Since most dip bars are set rather high off the floor, climbing up a step with 100+ pounds strapped around your waist can be a problem. Getting down after a grueling set can be downright scary. So do this: pull a bench in close to the dip bars, put the plates on the bench, put on your belt and chain, then load the plates onto the chain. Stand and lean into the bar and assume a firm grip, then ease off the bench onto the bars. Take a moment to make sure you're not swinging. Not at all. To help with this, lock your knees around the weights and hold them tightly in place. When you're still, you're ready to dip.

How low should you go? Just as low as you possibly can, at least until your upper arm breaks parallel. The lower you go, the more muscles and attachments come into play. Ease downward – don't just fall into the bottom or that will be the end of the set. When you're as low as you can go, punch upward, making sure your torso is perfectly straight and you're not swinging around. Come fully erect, pause long enough to make certain your body is positioned correctly, and do the next rep. Never look down when doing a dip. Look straight ahead or slightly upward, and when you hit the sticking point, which you will eventually, look way up. This will help you keep the weights right under your shoulders. Should you start swinging, even a little bit, stop and reset. Twisting, swinging, or dipping in a jerking motion is very stressful to your shoulders, elbows, and wrists. When you complete the prescribed set, step back on the bench.

The routine I give my athletes changes every week. It brings results because the low reps hit the attachments while the higher ones strengthen the muscles. It's a three week cycle. Week one, 5 sets of 8 with weights after a bodyweight (unweighted) warm-up set. Week two; a warm up set then 5 sets of 5, followed by a back-off set. Week three: warm-up set, 2 sets of 5 and 2 or 3 sets of 3 to limit, followed by a back-off set. The back-off sets will be 50 pounds less than you used for the top-end set and needs to be done to failure. I've had some athletes who handled 15 reps on their back-off sets and these really boost the overall workload.

A sample routine for someone who can do 100 lbs. for 3: Week one: bodyweight warm-ups, 20 reps. Then 25, 45, 55, 55, 55 for eight. No back-off set on 8-rep days. Week two: same warm-up, then 25, 50, 60, 70, and 80 for 5, plus a back-off set with 30 for as many as you can do. Week three: same warm-up, then 25 and 50 for 5, followed by 75, 90, and 100 for 3 and a back-up set with 50 to failure. These jumps are merely guidelines. What you want to do is handle as much as possible on your final set at each session. So if you do 5 with 80 and realize that you can use more weight that day, go ahead and jump the numbers up for one more set.

After a couple of these cycles, go after a PR single. This does a number of good things: it makes you utilize precise form, identifies your weaker area in the movement, hits your attachments even more than the triples, and elevates your confidence. But always put form ahead of the numbers. The movement, both up and down, must be done in a controlled, smooth fashion. Never crash downward. You can help your cause greatly by locking your legs snugly around the weights. If you begin to swing like a pendulum you're inviting injury, so if that happens, stop and reset. Almost everyone discovers, to their delight, that dipping with weights is easier than doing them unloaded. This is because the hanging weights help you to control the movement better.

One final comment on weighted dips before I move on – you have to progress to where you're using at least a hundred pounds for three before these will have an influence on your overhead press. So work hard to get to that level, and then it will be smooth sailing.

The next exercise is to help with the start of the press, so I aptly call them Press Starts. It's basically a way to overload the groups which are responsible for driving the bar off your shoulders. Let's say our imaginary athlete can press 200 lbs. After he finishes his pressing routine, he will load the bar to 225 and drive it just as high as he can off his shoulders, for 3 reps. The reps have to stay low on this exercise because each time the bar returns to the shoulders, it will slip out of the ideal start position just a tad. For some who have difficulty maintaining a solid starting position, doubles work better than triples. Now load the bar to 250 and do another set and if that goes okay, move to 275 for your final set. Three sets is enough since you've already done a lot of pressing. But press starts work best right in behind the press sessions because the muscles and attachments are well warmed up and the line of flight is already fixed in your mind.

However, in order for these to work you must drive the bar up in the exact bar path you use when you press. Otherwise, you're not hitting the desired muscle groups. And you don't want to get in the habit of giving the bar a knee kick to set it in motion. Your form has to be exactly the same as it is when you press. Two other key form points: when the bar reaches its apex, keep pressure up against it and try to hold it there for a few seconds. The longer the better, and when you lower the bar back to your shoulders do it slowly and it will serve as a negative.

After only a couple of sessions on these you'll discover that the next time you press, the weights feel surprisingly light on your shoulders. That tells you that you're doing press starts correctly.

Just as press starts will strengthen your start, push presses can improve your finish. On these, you will use a knee kick to drive the bar off your shoulders. However, you don't want to drive it all the way to lock-out; you want to be able to press it out for the final four inches. If it goes all the way to lock-out, it will help your jerk, but not your press. Again, the bar path has to be exact or it will not carryover to the press.

Triples are the order for the day for these also, but I can't really provide you with any prescribed numbers for the sets because individuals vary a great deal on these. If an athlete has a strong finish already, he will be able to handle a great deal more than someone who is having trouble with his finish. If your finish is strong, don't bother with these and spend more time on your start. But if you feel you need them, do 3 or 4 sets of three and work to max. Keep in mind that after you knee-kick the weight upward, you must relock your knees before you press the weight out the final four inches.

What else? Very steep inclines are beneficial. They work if the incline is really steep because the angle is close to what is used in the press. On these, I utilize the same routine that I outlined for weighted dips: 8s, 5s, and 3s plus an occasional session with singles to max.

Doing pure isometrics and/or isotonic-isometrics is a great way to get the press to move upward. In fact, they are both excellent exercises to get any lift to move in the right direction. However, there is a great deal involved in learning how to do either of these pure strength movements correctly. Much more than I can cram into a few pages, so I will save them for another article on Rip's website. That will give you time to learn the technique on these recommended exercises and make you even more ready to gain immediate benefits once you do get in a power rack and begin doing isometrics or isotonic-isometrics.

It's well worth the effort to go after a heavy overhead press. The strength gained in the upper body is extremely convertible, much more so than any other shoulder girdle exercise. It can be done with a limited amount of equipment – a bar and plates and a rack – and in a small space. And you

do not need a spotter, so it can be done even if you train alone. Contrary to what some writers are stating in fitness magazines, it's perfectly safe when done correctly. Just like nearly every other exercise in the book.

So add presses to your strength, fitness, or bodybuilding routine. I think you'll be pleased with the results.

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